

Remarks

Reconsideration of this Application is respectfully requested.

Claims 9-15 are pending in the application, with claim 9 being the independent claim.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

I. References Considered by the Examiner

The Examiner has stated that references listed in the specification but not submitted in an Information Disclosure Statement or specifically cited by the Examiner have not been considered. Applicants note that all the reference listed in the specification, or an English language equivalent thereof, were submitted in the Information Disclosure Statement filed on December 17, 2004. The Examiner-initialed Form PTO-1449 mailed to Applicants on December 1, 2005 along with the first Office Action indicates that the Examiner has considered each of these references.

II. Information Disclosure Statement

Applicants note that First Supplemental Information Disclosure Statement, citing three (3) copending applications, is being filed concurrently with this Amendment and Reply. Applicants respectfully request the Examiner consider the information disclosed therein.

III. Rejections under 35 U.S.C. § 103(a)

The Examiner has maintained the rejection of claims 9-15 under 35 U.S.C. § 103(a) as being unpatentable over Isenring et al., (U.S. Patent No. 6,407,100; "the '100

patent"), Heinemann, et al. (U.S. Patent No. 6,103,717) and Jautelat et al. (U.S. Patent No. 5,789,430; "the '430 patent"). Applicants respectfully traverse this rejection.

Applicants reiterate that for the reasons detailed in Applicants' Reply of May 1, 2006, and in Applicants' Reply of October 26, 2006, the Examiner has failed to properly establish a *prima facie* case of obviousness against claims 9-15. In sum, there is nothing in any of the cited patents (including the general statement that active compounds can be combined synergistically), the knowledge in the art, and the nature of the problem to be solved, that would provide a reason for making the specific three-compound combination of prothioconazole, trifloxystrobin and fluoxastrobin. In view of the pending claims which recite a "synergistically effective" combination, the failure of the cited art to support a *prima facie* case of obviousness is even more evident.

According to the '100 patent, "combination compositions are suitable for broadening the spectrum of action or for specifically influencing plant growth." Column 8, lines 51-53. According to the '430 patent, known compounds can be mixed with its compounds to, "widen the spectrum of action or to prevent the build up of resistance. In many cases this results in synergistic effects" Column 32, lines 27-29. The '717 patent discloses fluoxastrobin and recites the same general language as the quote from the '430 patent. See, column 12, lines 58-60. Taken together, the '100, '717 and '430 patents, at most, teach that compounds can and are often combined. However, none of the cited patents specifically refer to the presently claimed three-compound combination that possesses a synergistic effect.

In contrast to the cited patents, the present invention is directed to a specific combination, which possesses a synergistic effect and comprises prothioconazole,

trifloxystrobin and fluoxastrobin. Neither the combination nor its recited synergistic effect is obvious in view of the cited art.

IV. Synergistic Effects

a. "Synergistically Effective" in Claims

The Examiner has stated that "[t]he synergism as presented in the specification is not in claims." Office Action, p. 7, under "Data in Specification". Applicants respectfully traverse this aspect of the rejection.

In Reply to the Final Office Action dated July 26, 2006, Applicants submitted a Reply on October 26, 2006, in which independent claim 9 was amended adding "synergistically effective" to address the Examiner's concerns with respect to the synergistic effect presented in the specification, but previously not in the claims.

In Request for Continued Examination Transmittal dated January 26, 2007, Applicants requested any previously filed unentered amendments and amendment enclosed with the RCE to be entered. The Examiner acknowledged that Applicants' submission filed on January 26, 2007 has been entered. Office Action, p. 3, under "Continuation Examination under 37 CFR 1.114". Therefore, Applicants submit that currently pending claims 9-15 recite "synergistically effective" and request that the rejection be reconsidered and withdrawn.

b. Synergistic Effects

The Examiner requested Applicants to explain how data in the specification represents a synergism. Applicants note:

1. An additive effect is the combined effect of two or more chemicals calculated as the sum of the effects components would have if acting alone. Definition available

from the Environmental Protection Agency ("EPA") website at http://iaspub.epa.gov/trs/trs_proc_qry.alphabet?p_term_nm=A. A synergistic effect is an effect whereby two substance together have more of an impact than anticipated. Definition available from the EPA website at http://iaspub.epa.gov/trs/trs_proc_qry.alphabet?p_term_nm=S.

2. The data at page 11 in the specification shows that when acting alone at an application rate of 100 g/ha, each individual component, trifloxystrobin, prothioconazole and fluoxastrobin of the combination has a percent efficacy of 56 %, 56 % and 67 %, respectively. For the reasons detailed in Applicants' Supplemental Reply of January 26, 2007, the calculated expected additive effect of the three-component combination at the application rate of 25 g/ha of trifloxystrobin, 50 g/ha of prothioconazole and 25 g/ha of fluoxastrobin is 59 %.

3. In the combination, the three components are present in the ratio of 1 part trifloxystrobin, 2 parts prothioconazole and 1 part fluoxastrobin, *i.e.* 1:2:1, or stating in another way at the application rate of 25 g/ha of trifloxystrobin, 50 g/ha of prothioconazole and 25 g/ha of fluoxastrobin, 100 g/ha in total. The combination has a measured efficacy of 78 %, much higher than the expected additive effect. Therefore, the claimed combination has a synergistic effect.

The examiner stated that the Examiner disagrees with the basis of Applicants' argument. According to the Examiner, "when calculating what is expected 56+56+67 should be divided by three." Office Action, p. 7, bullet point #1, under "Response to Remarks". Thus, following this calculation method, an expected efficacy of the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin is:

$$(56+56+67)/3 = 59.7 \%$$

As shown in Table 1 on page 11 of the specification, the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin has a measured efficacy of 78%, much higher than expected efficacy of 59.7 %. Therefore, the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin as claimed in claim 9 has a synergistic effect according to this calculation.

Furthermore, according to the Examiner, "[s]ince the ratio of components used in present invention is 1:2:1. When component II is doubled than the total will be $56+(2 \times 56)+67$. This number should be divided 4 and not 3 for expected results." Office Action, p. 7, bullet point #2, under "Response to Remarks". Following this second calculation method, an expected efficacy of the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin is

$$[56+(2 \times 56)+67]/4 = 58.75 \%$$

As shown in Table 1 on page 11 of the specification, the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin has a measured efficacy of 78 %, much higher than expected efficacy of 58.75 %. Therefore, the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin as claimed in claim 9 has a synergistic effect according to this second calculation.

For the reasons set forth in Applicants' previous replies, and in view of the arguments presented above, Applicants respectfully submit that Applicants have shown that the measured efficacy of the three-component combination of trifloxystrobin, prothioconazole and fluoxastrobin is greater than that of the calculated expected additive effect and, therefore, is a synergistic effect under either calculation method. In

conclusion, following either of the Examiner's two calculation methods for expected efficacy, the measured efficacy is greater than that of the expected efficacy obtained from the two calculation methods and therefore, is a synergistic effect. Reconsideration and withdrawal of the outstanding rejection is earnestly solicited.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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